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### REMARKS

Claims 1-24 remain pending. Various claims have been amended primarily to correct their dependencies.

In the Office Action, the Examiner objected to the abstract; rejected claims 1-3, 5-9, 11-15, 17-21, 23, and 24 under 35 U.S.C. § 103(a) as being unpatentable over Kim (U.S. Patent No. 6,081,593) in view of Batalama et al. (U.S. Patent No. 6,078,573); and stated that claims 4, 10, 16, and 22 would be allowable if rewritten in independent form.

The amended Abstract should obviate the objection thereto.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See M.P.E.P. § 2143.

A *prima facie* case of obviousness has not been established for claims 1-3, 5-9, 11-15, 17-21, 23, and 24, at least because no suggestion or motivation has been provided to combine Kim and Batalama et al. The proposed justification on page 3 of the Office Action, "to improve the echo signal and noise level in both transmitting and receiving path," is conclusory and devoid of citation to either reference. Such a bare conclusion does not establish a *prima facie* case of obviousness without evidence supporting that conclusion. No reasoning, in the references or otherwise, has been provided detailing what deficiency or need in the adaptive filter 406 of Kim

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would have motivated one of ordinary skill in the art to add the teachings of Batalama et al. In the absence of such evidence, Applicant respectfully submits the combination is motivated solely by Applicant's disclosure, which is impermissible hindsight. Because no *evidence* of a suggestion or motivation to combine Kim and Batalama et al. has been provided, a *prima facie* case of obviousness has not been established for claims 1-3, 5-9, 11-15, 17-21, 23, and 24.

A *prima facie* case of obviousness also has not been established, because at least Batalama et al. teaches away from the proposed combination. See M.P.E.P. § 2145(X)(D) ("proposed modification cannot render the prior art unsatisfactory for its intended purpose or change the principle of operation of a reference"). Batalama et al. appears to disclose a scheme for using an auxiliary vector technique to distinguish a single user in a multiple user, wireless environment. See Abstract, lines 1-4 ("A method and apparatus is provided for demodulating direct sequence, spread spectrum CDMA signals in the presence of unknown spread-spectrum multiuser interference and additive white Gaussian noise") and col. 9, lines 21 and 22 ("where  $s_0$  [sic,  $S_0$ ] is the effective signature, or spreading code, of the user of interest"). Thus, Batalama et al. at most suggests using an auxiliary vector technique to distinguish a single user in a CDMA environment, but not for "canceling echo signals" as claimed. Hence, at least Batalama et al. teaches away from the proposed combination.

To incorporate this single user detection scheme of Batalama et al. into the echo cancellation context of Kim would necessarily change the principles of operation of the references. Nowhere in Batalama et al. is it suggested that the auxiliary vector technique could be used in the context of echo cancellation. Further, to change the auxiliary vector technique

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from the wireless, CDMA environment of Batalama et al. into the voice mail system context of Kim would necessarily change the principles of operation of both Kim and Batalama et al. Thus, the references teach away from the proposed combination. A *prima facie* case of obviousness has not been established for claims 1-3, 5-9, 11-15, 17-21, 23, and 24 for this additional reason.

Reconsideration and allowance of pending claims 1-24 is respectfully requested.

In the event that any outstanding matters remain in this application, Applicant requests that the Examiner contact Alan Pedersen-Giles, attorney for Applicants, at the number below to discuss such matters.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0221 and please credit any excess fees to such deposit account.

Respectfully submitted,

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